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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/142,452    01/19/99    WACK

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FRANCIS A KEEGAN  
LALOS & KEEGAN  
1146 NINETEENTH STREET NW  
WASHINGTON DC 20036-3703

EXAMINER

MARKOFF, A

ART UNIT	PAPER NUMBER
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1746

DATE MAILED:

08/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

Q9/142,452

Applicant(s)

WACK ET AL

Examiner

Alexander Markoff

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- 1) ☒ Responsive to communication(s) filed on 5/22/00-6/13/00.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 12-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

### ***Response to Amendment***

2. The amendment filed 5/22/00 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the range for the amount of water in claims (33-36).

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 33-36 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims recite the range for amount of water, which is not supported by the original disclosure.

5. Claims 12 – 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the Examiner in the previous Office Action requested the Applicant's assistance in placing the claims in the correspondence with the current US patent practice. The Applicants corrected some deficiencies in the claims. However, the claims are still not in compliance with the requirements of 35 USC 112.

The following is some of the noted deficiencies remaining in the claims:

Claims 12 – 46 are indefinite because the term "active" is relative in nature lacking proper comparative basis.

The claims are indefinite also because it is not clear what has an immiscibility gap and what is capable of forming separate phases.

It is also not clear how can the separate phases be established within the immiscibility gap.

Claims 20, 31, 32, and 42 are indefinite because it is not clear how can C<sub>1</sub> alkyl group be unsaturated, how can groups C<sub>1</sub> and C<sub>2</sub> be cyclic, how can groups C<sub>1</sub> be alkylene. It is also not clear what is referenced as -CH<sub>3</sub>- ; -C (=O).

These claims are also indefinite because they comprise improper and not properly defined Markush groups.

It is further noted that claims 20 and 31 have no period at the end of the claim.

Claims 31 and 32 are indefinite because it is not clear how the last introduced amendment ("the improvement comprising") is related to the subject matter of the claim.

The Examiner again requests the Applicants assistance to place the claims in compliance with the requirements of 35 USC 112.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 25 and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by EPA 475,596.

EPA 475,596 teaches (entire document, especially columns 4 and 5) a method for cleaning articles by contacting them with a liquid mixture of water

with an organic compound or with a vapor of the mixture of water and the organic compound to remove contaminants from the article. The vapor is allowed to condense on the article. The mixture forms an azeotrope during the "liquid phase-to-vapor phase transition.

As to claims 31 and 32:

The Applicants are trying to claims any organic compound having the general formula recited by claim 31. It is noted that numerous organic compounds would have this general formula. The Examiner can list just several examples: methanol, ethanol, isopropanol, terpenes, ethers, esters, etc.

Since EPA 475,596 recites the use of such compounds it meets all the claimed limitations.

3. Claims 12-38 and 40-46 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/28535.

WO 96/28535 teaches a method for cleaning articles comprising contacting the article with an azeotropic cleaning composition comprising water and an organic compound, forming azeotrope of this composition and separating the phases of this composition. WO 96/28535 teach conducting the process at the claimed temperatures.

WO 96/28535 specifically states that the composition is an emulsion.

WO 96/28535 does not specifically state that the emulsion is prepared by agitation. However, agitation is the only known way to create emulsions.

Thereby, it is inherent that the emulsion in WO 96/28535 is prepared by agitation.

As to claims 31 and 32:

The Applicants are trying to claim any organic compound having the general formula recited by claim 31. It is noted that numerous organic compounds would have this general formula. The Examiner can list just several examples: methanol, ethanol, isopropanol, terpenes, ethers, esters, etc.

Since WO 96/28535 recites the use of such compounds it meets all the claimed limitations.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/28535 in view of McGraw-Hill Concise Encyclopedia of Science & Technology (MGHCEST).

WO 96/28535 teaches a method for cleaning articles comprising contacting the article with an azeotropic cleaning composition comprising water and an organic compound, forming azeotrope of this composition and separating the phases of this composition. WO 96/28535 teach conducting the process at the claimed temperatures.

WO 96/28535 specifically states that the composition is an emulsion.

WO 96/28535 does not specifically state that the emulsion is prepared by agitation. However, agitation is the only known way to create emulsions. Thereby, it is inherent that the emulsion in WO 96/28535 is prepared by one of the types of agitation.

WO 96/28535 does not teach the use ultrasound.

However, the use of ultrasound for preparing emulsions was conventional in the art as evidenced by the MGHCEST (page 705). It would have been obvious to an ordinary artisan at the time the invention was made to use a conventional ultrasonic agitation for its primary purpose in the method of WO 96/28535 with reasonable expectation of adequate results in order to create the emulsion.



### ***Response to Arguments***

8. Applicant's arguments filed 5/22/00 have been fully considered but they are not persuasive.

The Applicants argue that the rejection over EPA 475596 is not proper because the reference does not state that an emulsion is formed.

This is not persuasive because claims 25 does not require forming an emulsion, and claims 31 and 32 are directed to organic compounds not to a process.

The Applicants also argue that solvents recited by EPA 475596 do not have "an immiscibility gap capable of forming an emulsion".

This is not persuasive. First, the claims do not require the organic compound to have the "gap". It is an unspecified "mixture" which has to have the "gap".

Second, the Applicants statement contradicts to the teaching of the reference because the reference specifically state that water and solvents form separate phases.

The Applicants argue that WO 96/28,535 does not teach that the composition is an emulsion and base all their arguments on this statement.

However, in contrast with the applicants statement, WO 96/28,535 teaches an emulsion (page 3, lines 5-8). This fact was pointed out during the last interview with the Attorney of the record conducted at 6/13/00. Thereby, the Examiner's position is fully supported by the reference and the Applicants arguments are not persuasive.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Monday - Friday 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 703-308-4333.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Alexander Markoff  
Art Unit 1746

am  
August 11, 2000